## Zoa... Surge Suppressor Capacitors



Vishay ESTA

## Zinc Oxide RC-Surge Suppressor (Zoa) Capacitors, for HV-Motor and Transformers



### **FEATURES**

- Zoa's are RC surge suppressors with included varistors
- · Zoa's will protect transformers and motors from insulation failures
- · Zoa's will significantly reduce the expenses for maintenance and insulation failures of motors and transformers
- · Zoa's will eliminate striking (re- and pre-) transients of connected vacuum and other switchgears
- · Zoa's prevent high frequency currents at zero crossing in the contact gap of the switch

#### **APPLICATIONS**

- · Zoa's are optimized to be mounted inside the motor or transformer terminal boxes to be connected to each phase and earth
- · Zoa's will protect vacuum and other switchgears
- Surge suppression

QUICK REFERENCE DATA					
Series	Zoa				
Description	Zinc oxide RC-surge suppressor (Zoa) for HV-motor and transformers				
Туре	Surge suppressor with integrated varistor				
Technology	All-film polypropylene / aluminum foil, MKP				
Voltage min. (V)	1000				
Voltage max. (V)	11 000				
Frequency min. (Hz)	50				
Frequency max. (Hz)	60				
Capacitance min. (µF)	0.1				
Capacitance max. (µF)	0.6				

TECHNICAL DATA				
Rated frequency	50 Hz or 60 Hz (other frequencies on request)			
Insulation class	3.3 kV to 11 kV			
Internal connection	Live case, star, or delta			
Temperature category	-25 °C to +50 °C			
Capacitance tolerance	-5 % / +10 %			
Dielectric	All-film polypropylene / aluminum foil			
Impregnating agent	Synthetic oil (non-PCB)			
Standards	IEEE and CIGRE for motor impulse withstand levels			
Bushings	Porcelain, welded type, M10 / M12			
Casing	Stainless steel			
Standard color	RAL 7033 / other colors available upon request			
Erection	Indoor			



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### FORMS OF CONSTRUCTION





Form 1

Form 2



Form 3

### **CORROSION PROTECTION**

Case material: stainless steel case AISI 409 (AISI 304 as option) Thickness of material 1.5 mm, top cover and bottom 2.0 mm

### **DIMENSION AND WEIGHT**

ZOA RC-SURGE SUPPRESSOR CAPACITORS 50 Hz / 60 Hz, IP00, INDOOR							
RATED VOLTAGE U <sub>N</sub> (kV)	С <sub>N</sub> (µF)	РН	CASING DIMENSIONS L x W x H (mm)	WEIGHT (kg)	FORM		
3.3	0.1	1	116 x 72 x 155	2	1		
6.6	0.1	1	116 x 72 x 155	2	1		
3.3	3 x 0.2	3	345 x 135 x 220	17	2		
6.6	3 x 0.2	3	345 x 135 x 220	19	2		
11	3 x 0.2	3	450 x 110 x 240	20	3		

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TYPE NOMENCLATURE								
[	<b>Z</b> o 1	<b>a</b> 2 3	<b>s o</b> 4 5	<b>3.3</b>	/ <b>0.1</b>	]		
1	2	3	4	5	6	7		
Zinc oxide	a = all film dielectric	f: outdoor n. E.: indoor	s: live casing n. E.: dead casing	o: non PCB impregnating agent	Rated voltage (kV)	Rated output (kvar) Rated capacitance (μF)		

Note

• n. E. = no entry



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